



Michigan State Employees Retirement System

Pension Actuarial Valuation Results
as of September 30, 2011



Gabriel Roeder Smith & Company
Consultants & Actuaries
www.gabrielroeder.com

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Actuarial Valuation Process

Member Data



Financial Data



**Actuarial
Valuation**

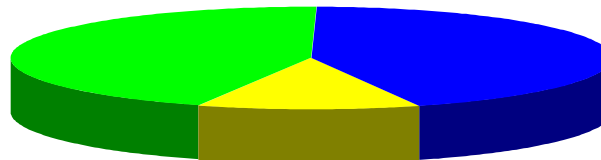
Actuarial Assumptions



Plan Provisions



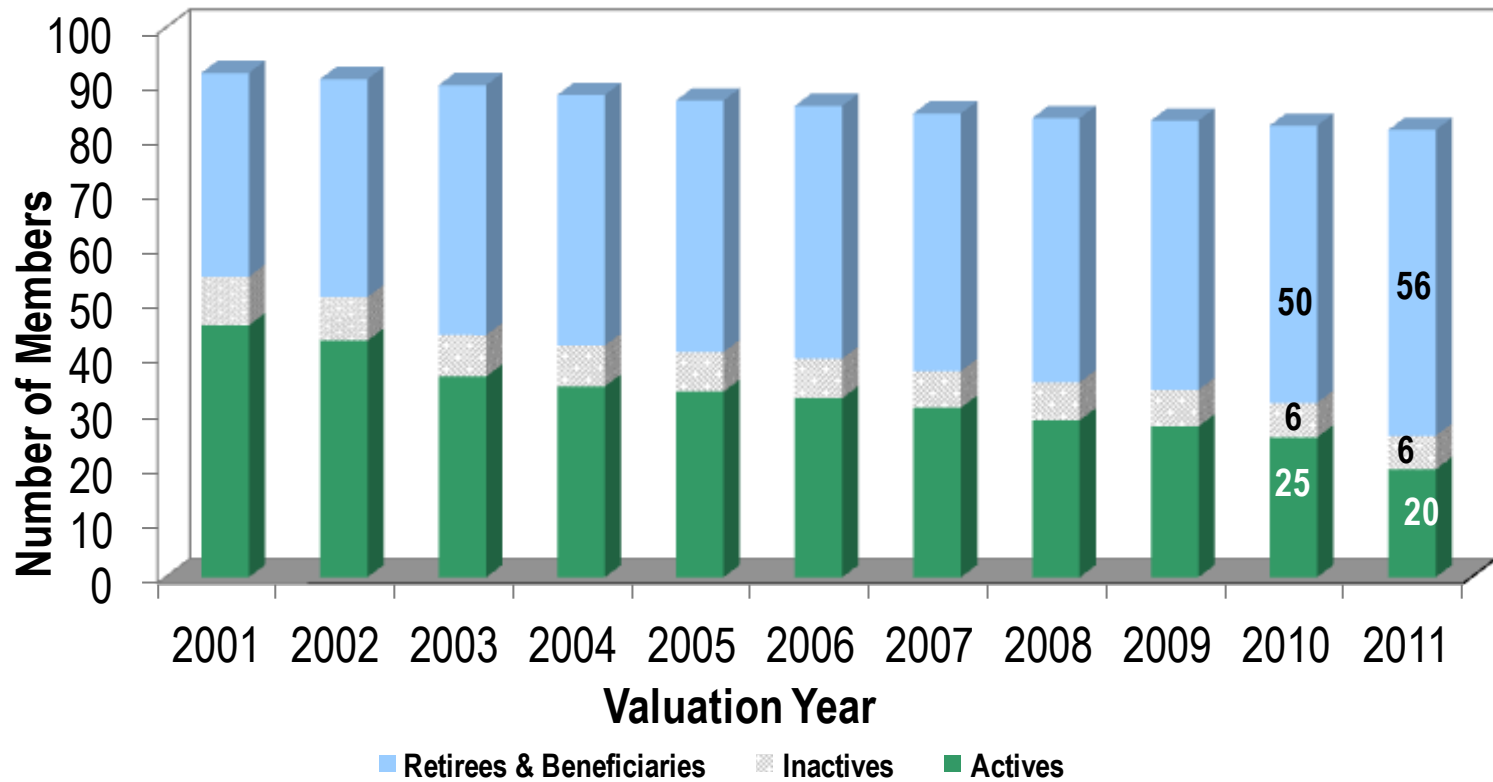
Actuarial Cost Method





Membership Data

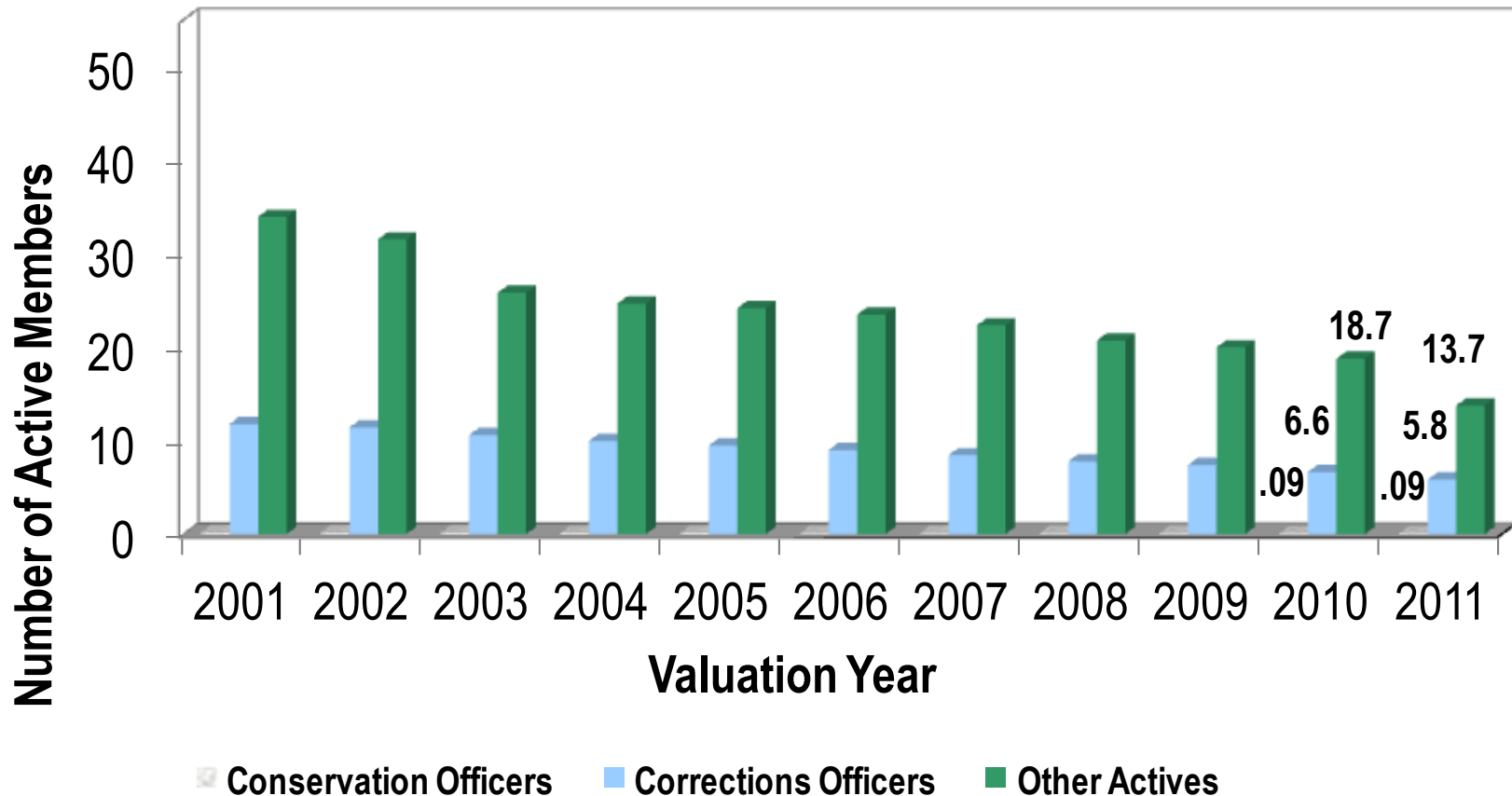
(Counts in Thousands)





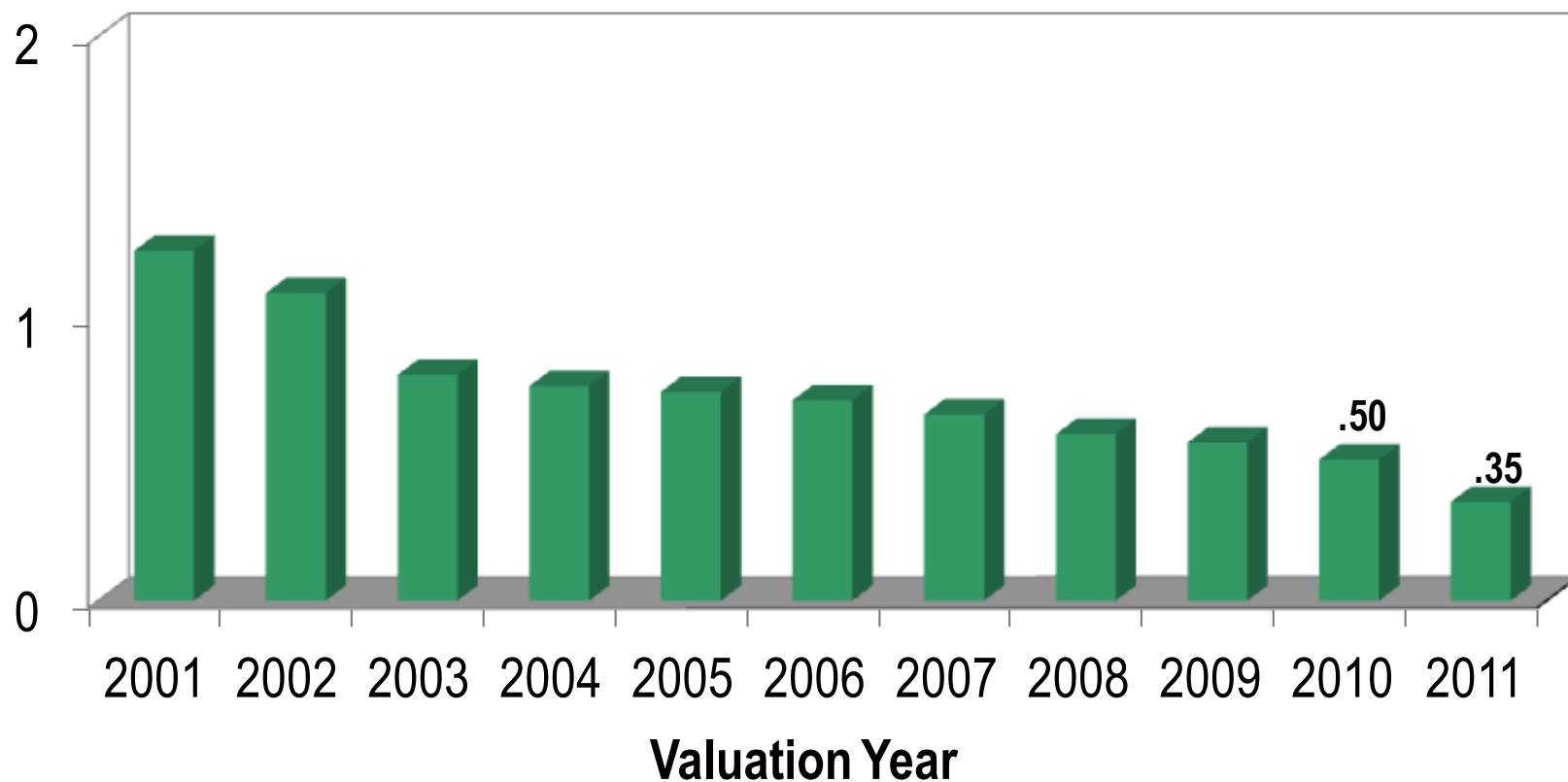
Active Members by Classification

(Counts in Thousands)



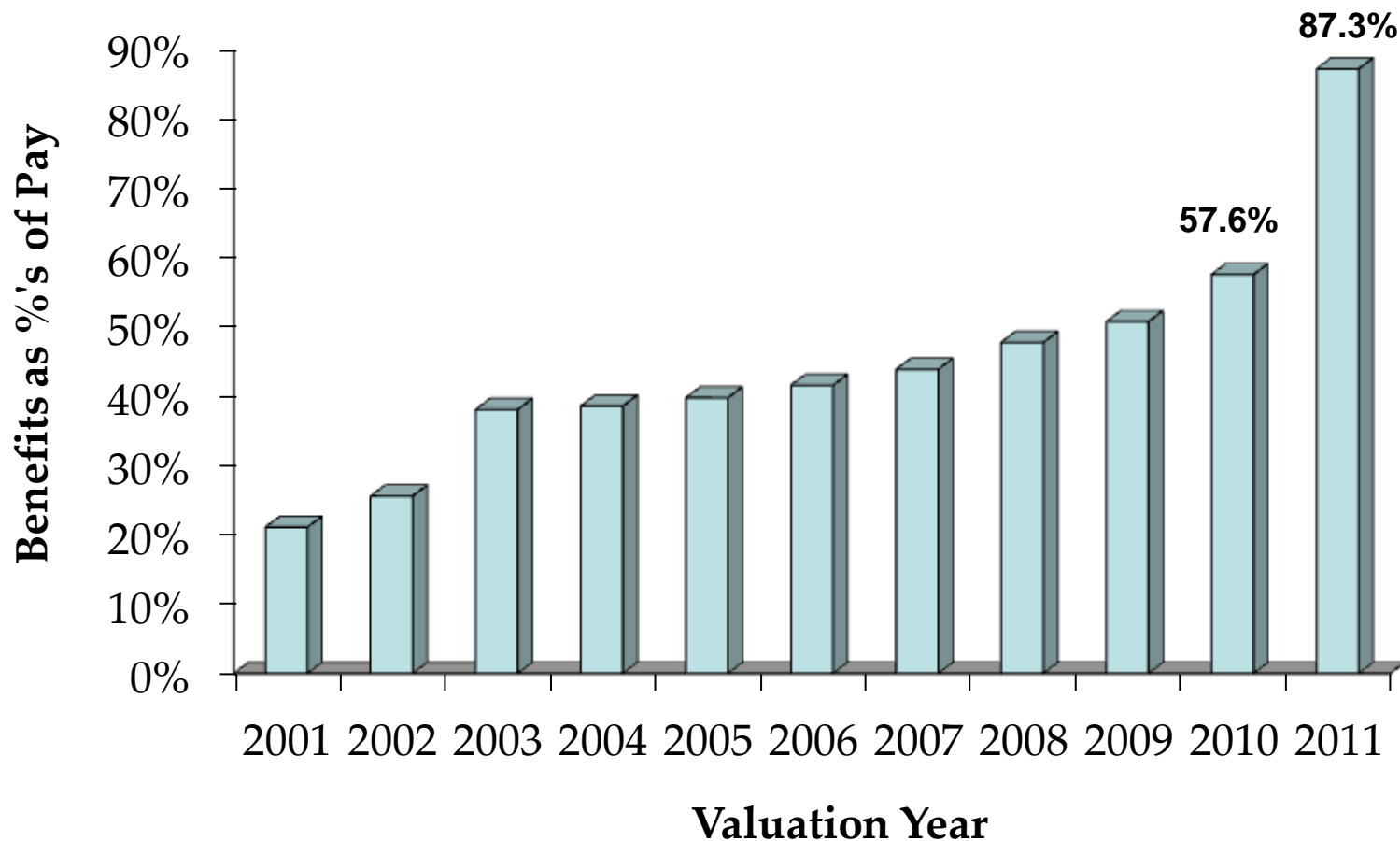


Ratio of Active Members to Pension Benefit Recipients



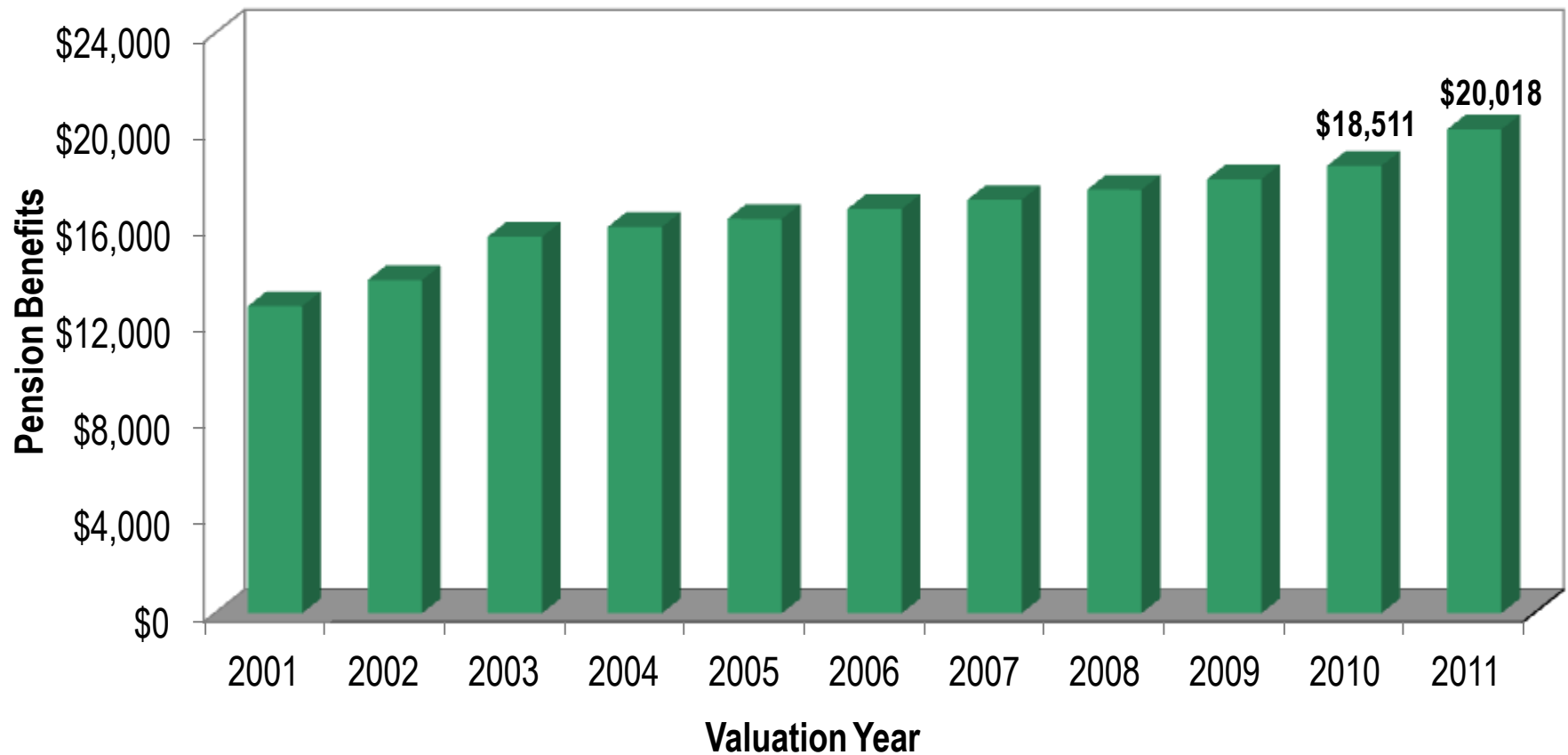


Pension Benefits Expressed as %'s of Active Member Pay



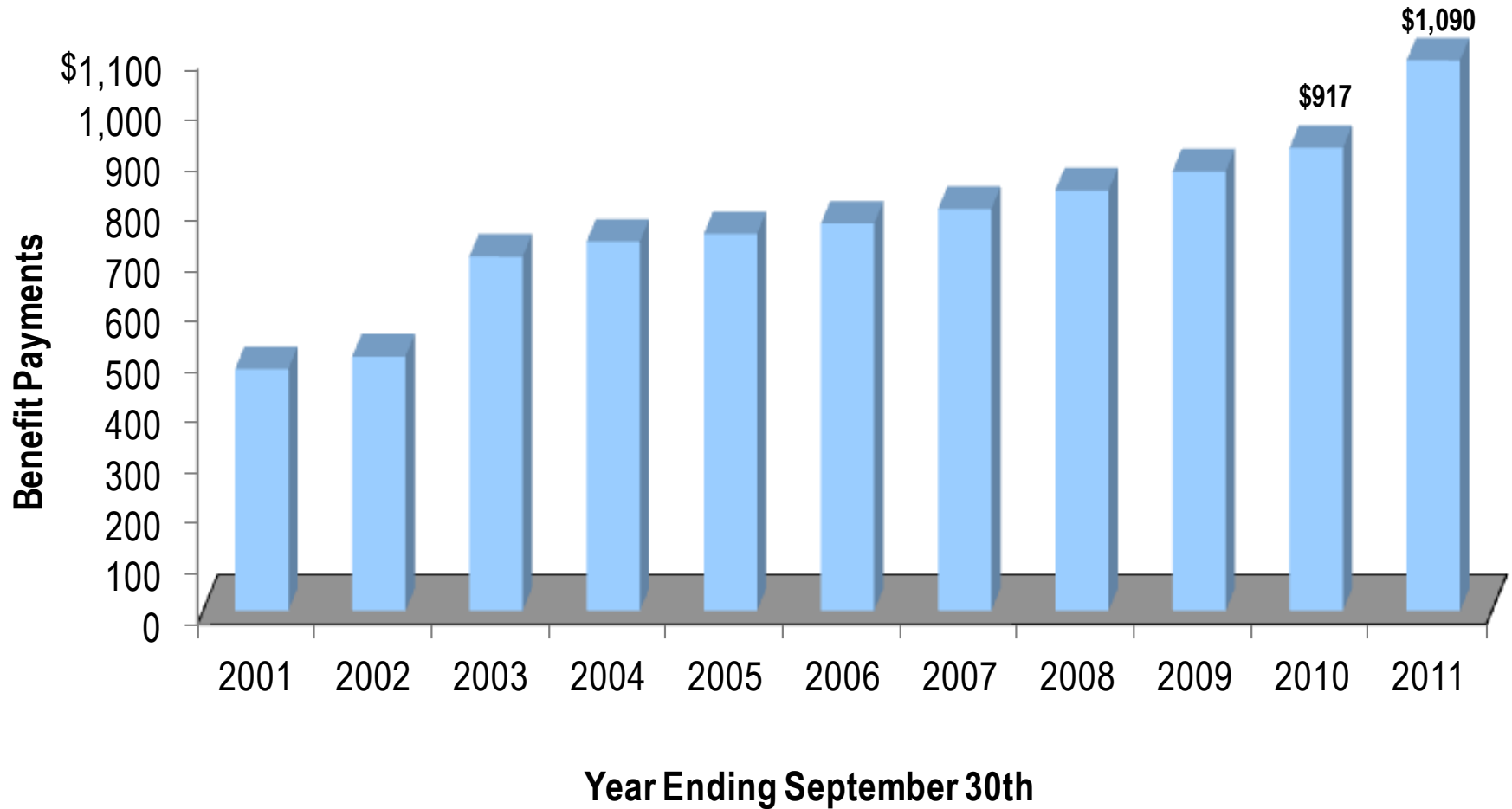


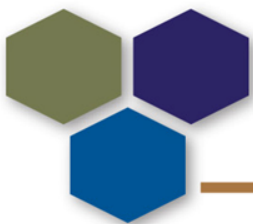
Average Annual Pensions





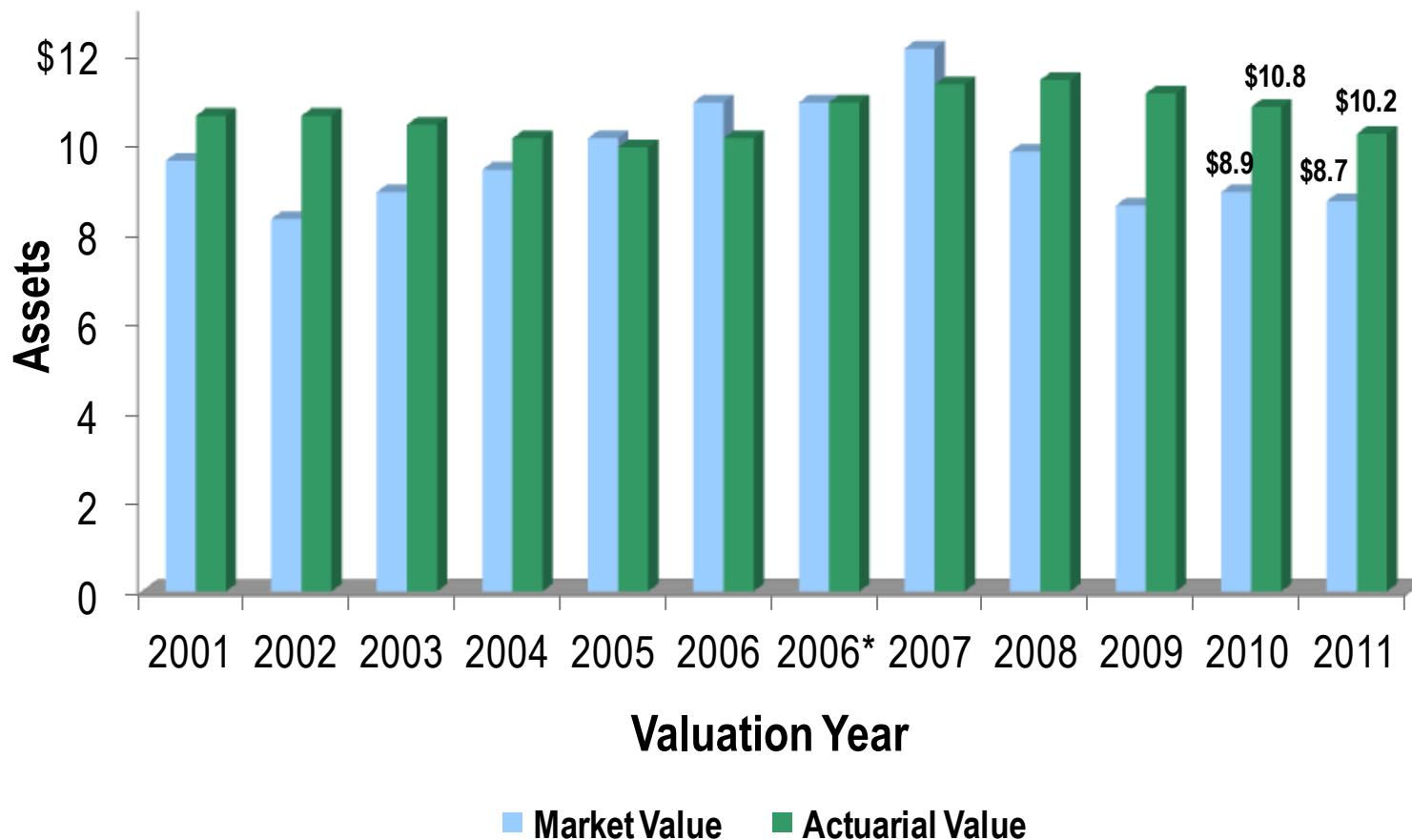
Pension Benefit Payments by Fiscal Year (Amounts in Millions)





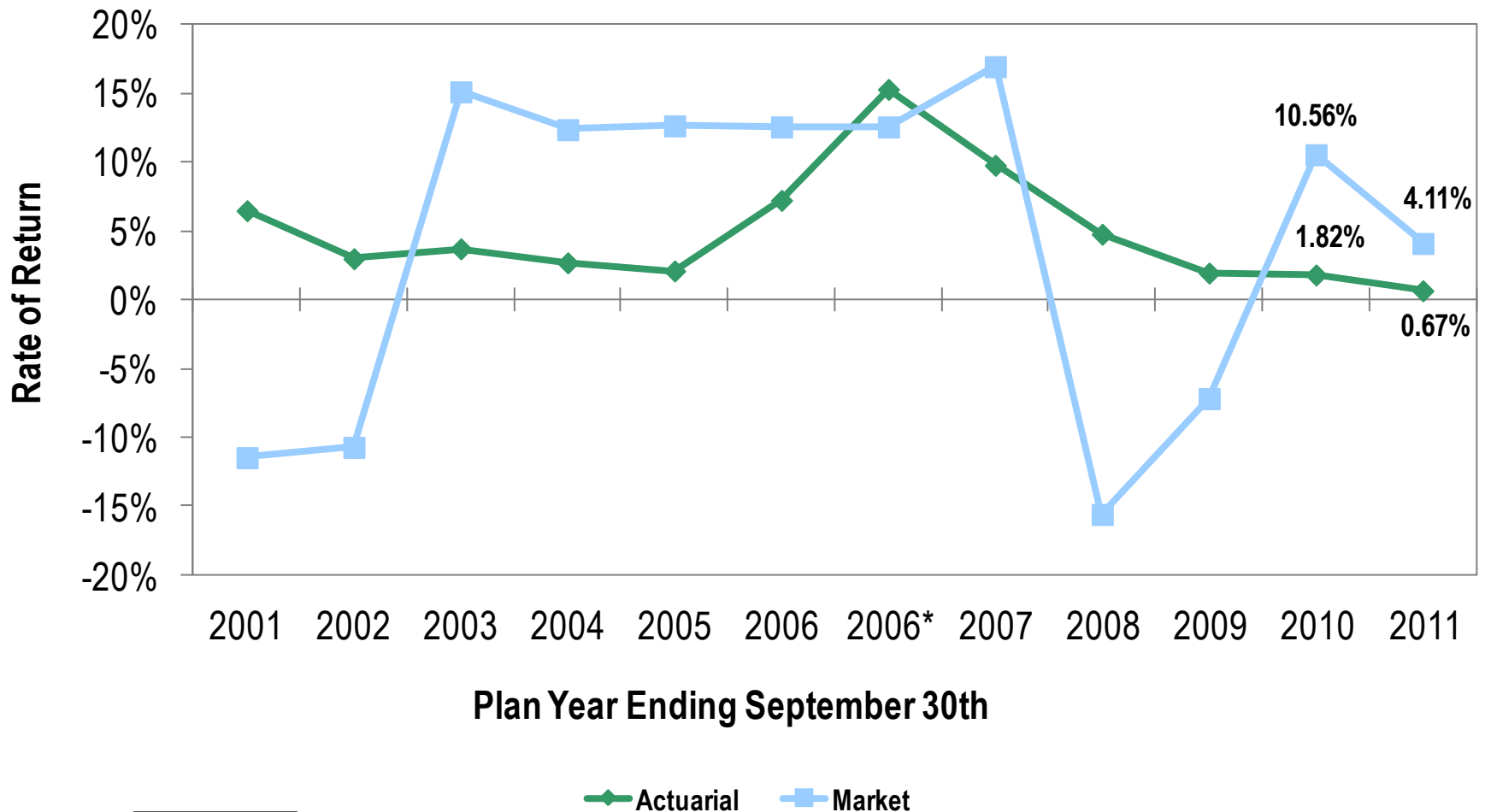
Growth of Pension Assets

(Amounts in Billions)

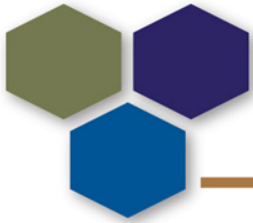


* After adjusting to market value.

Actuarial & Market Net Rates of Return

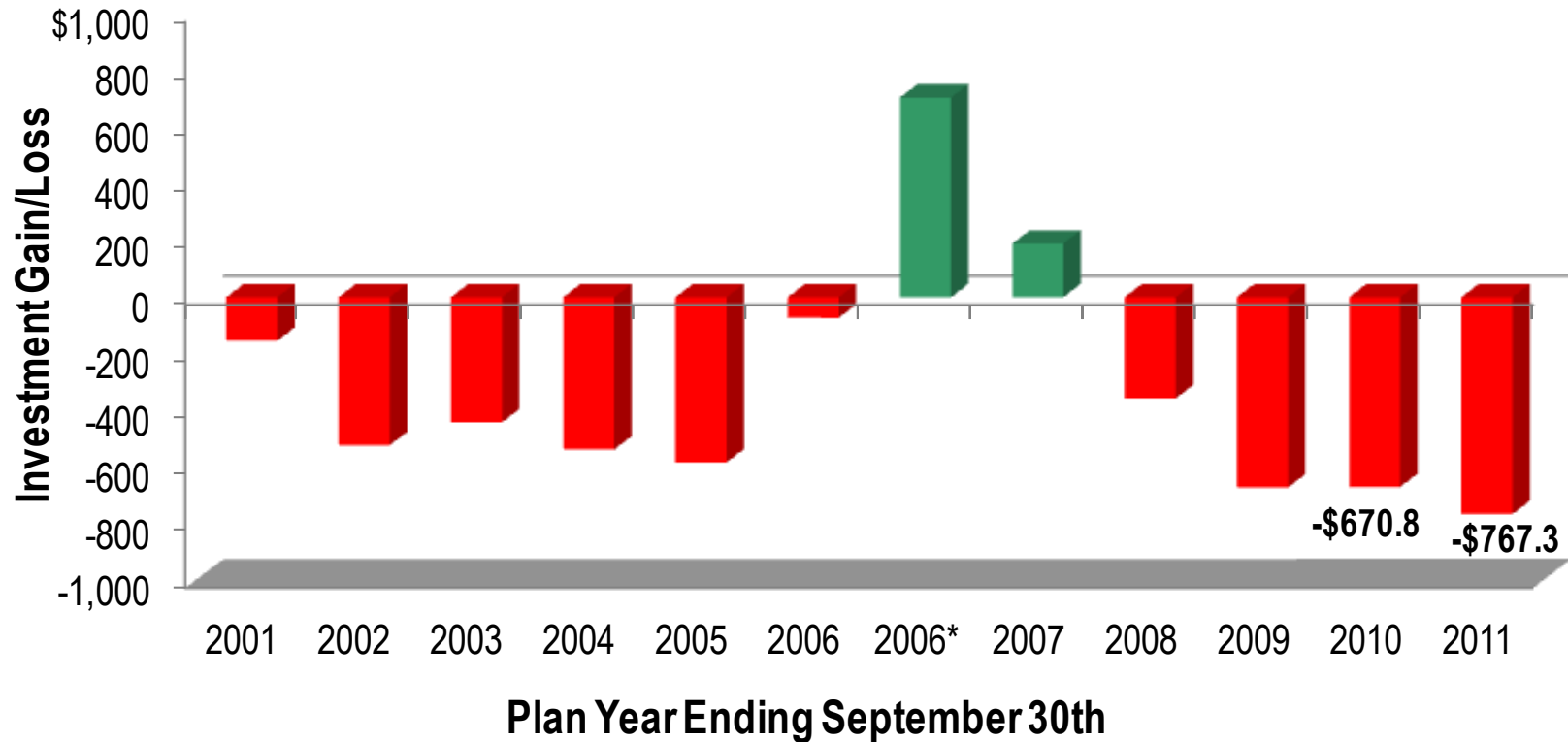


* After adjusting to market value.



Investment Gain/Loss

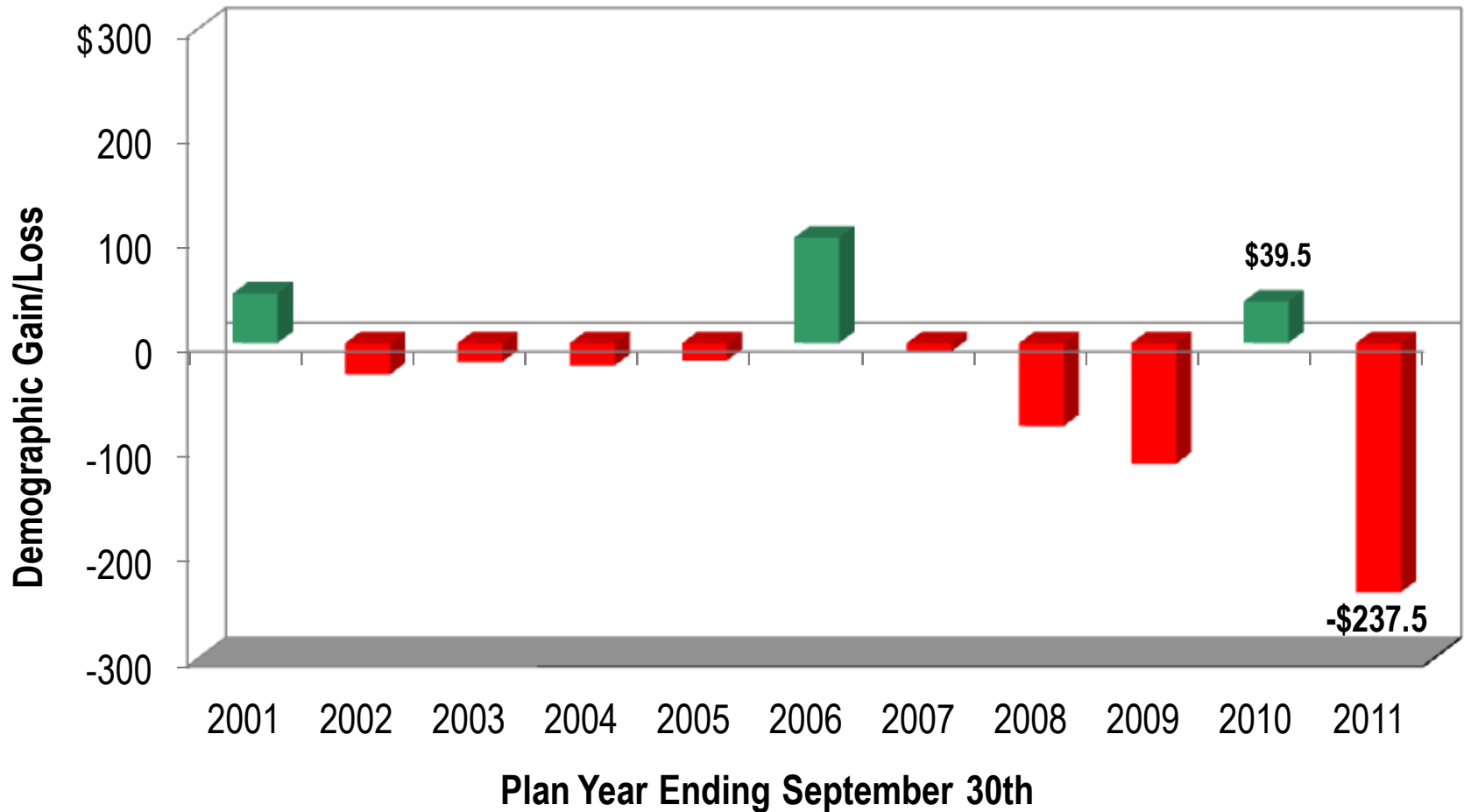
(Amounts in Millions)



* After adjusting to market value.

Demographic Gain/Loss

(Amounts in Millions)





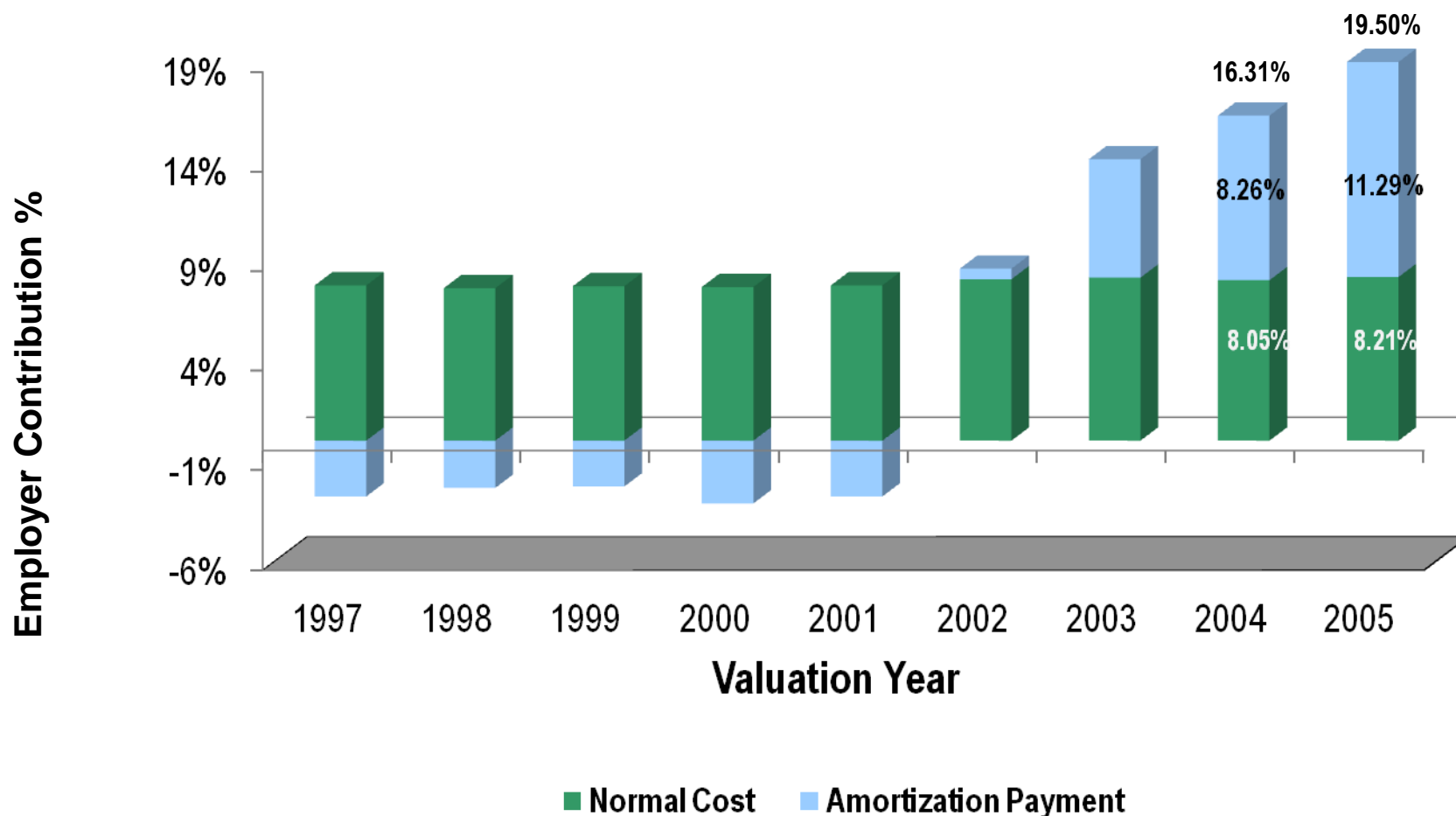
Gain/(Loss) by Type of Activity

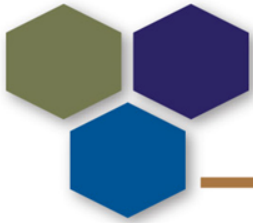
(Amounts in Millions)

Plan Year					
Ending 9/30	2011	2010	2009	2008	2007
Rehires	\$ (21.97)	\$ (33.96)	\$ (52.28)	\$ (1.85)	\$ (6.79)
Retiree Deaths	(51.64)	(27.00)	(80.10)	(38.48)	21.93
Investments	(767.32)	(670.79)	(672.97)	(357.93)	189.88
Pay Increases	10.70	127.51	59.58	(14.66)	(8.35)
Withdrawal	1.64	(3.51)	(6.44)	20.07	5.75
Retirements	(32.13)	(23.46)	17.89	(5.09)	(0.66)
Other	(144.05)	(0.07)	(53.63)	(38.96)	(19.77)
Total	(1,004.77)	(631.28)	(787.95)	(436.90)	181.99

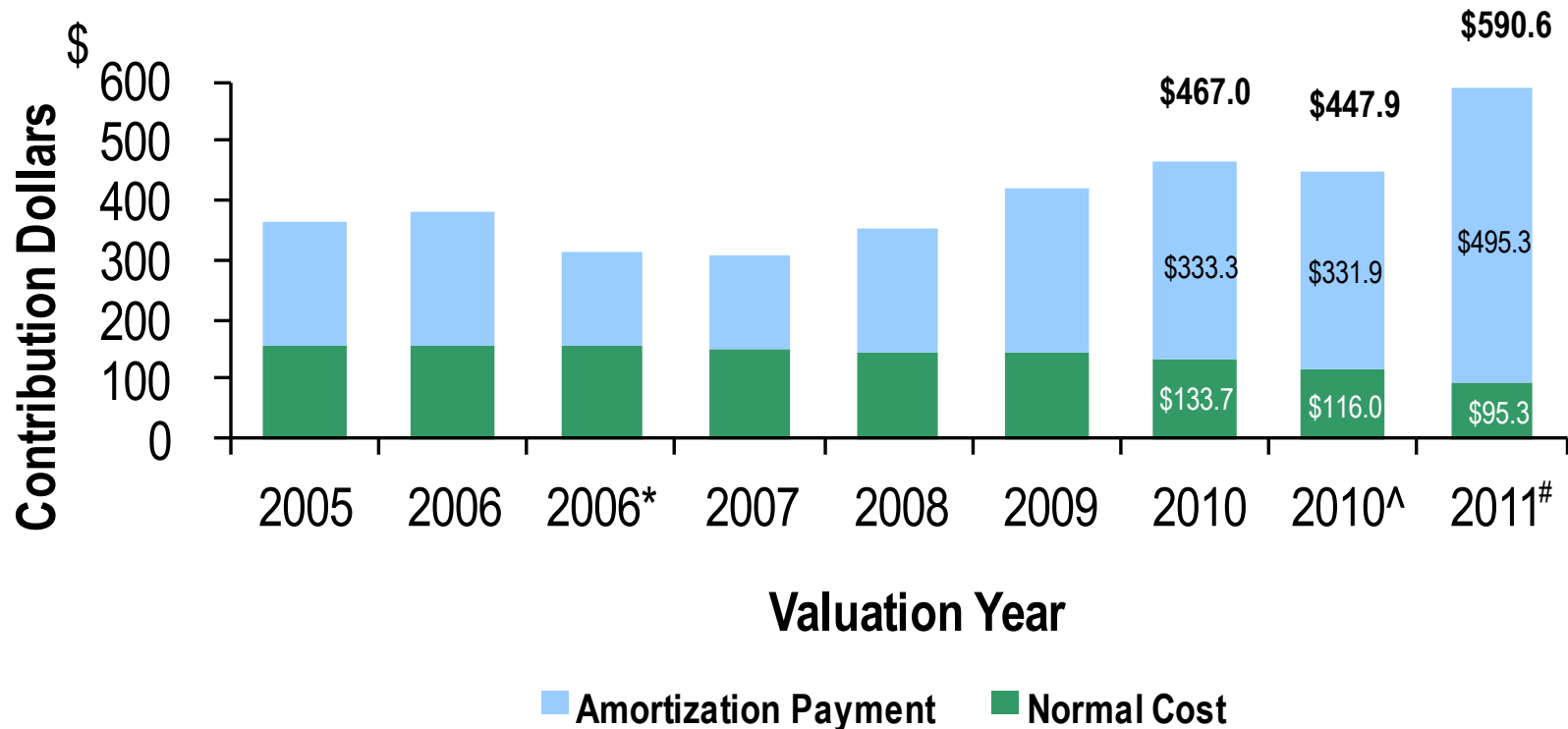


Historical Employer Contribution %'s Valuation as of September 30





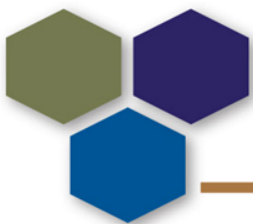
Employer Contribution Dollars (in Millions) Valuation as of September 30



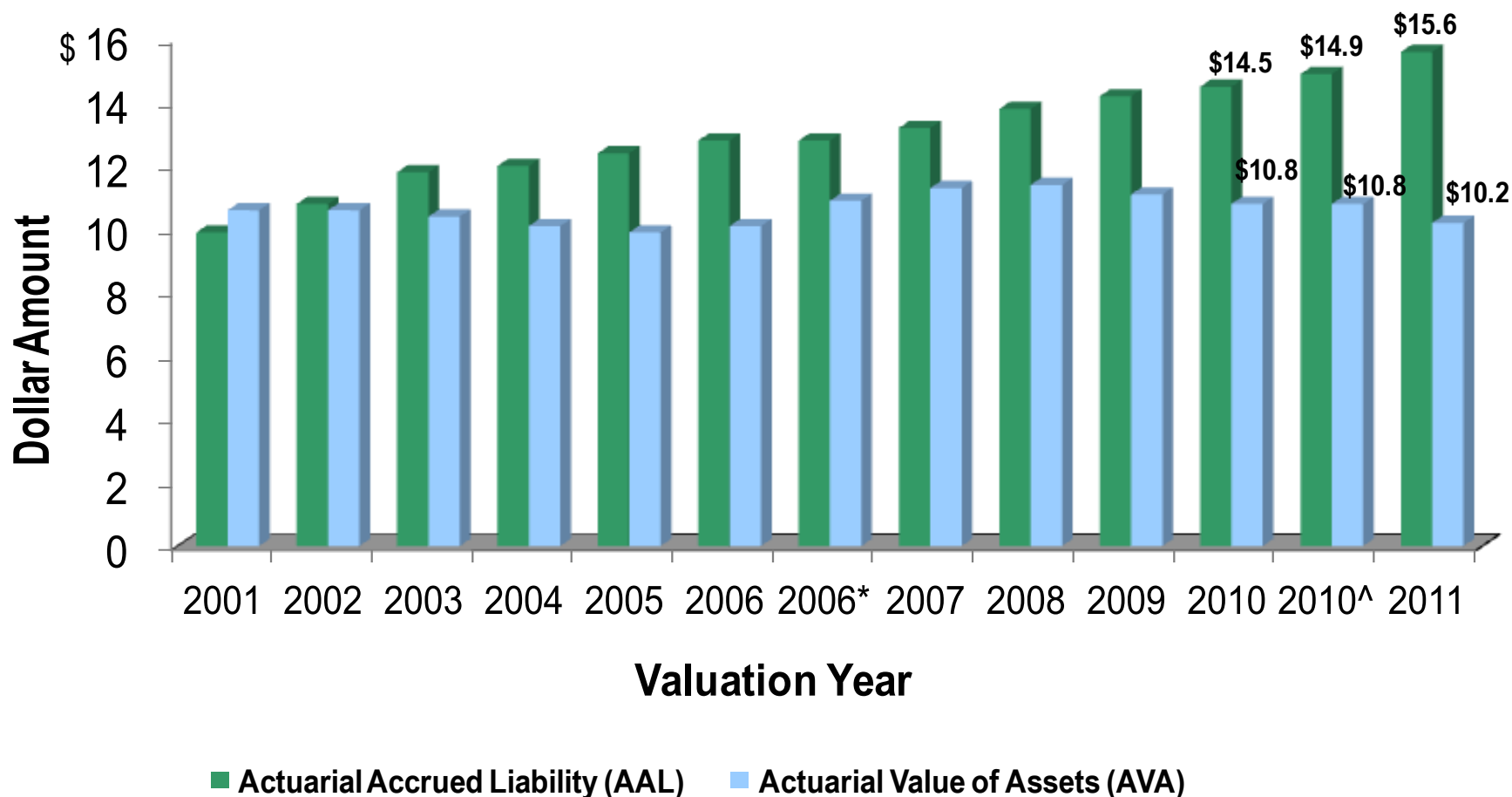
* After adjusting to market value.

^ Revised actuarial assumptions and methods.

Includes ERI payment.



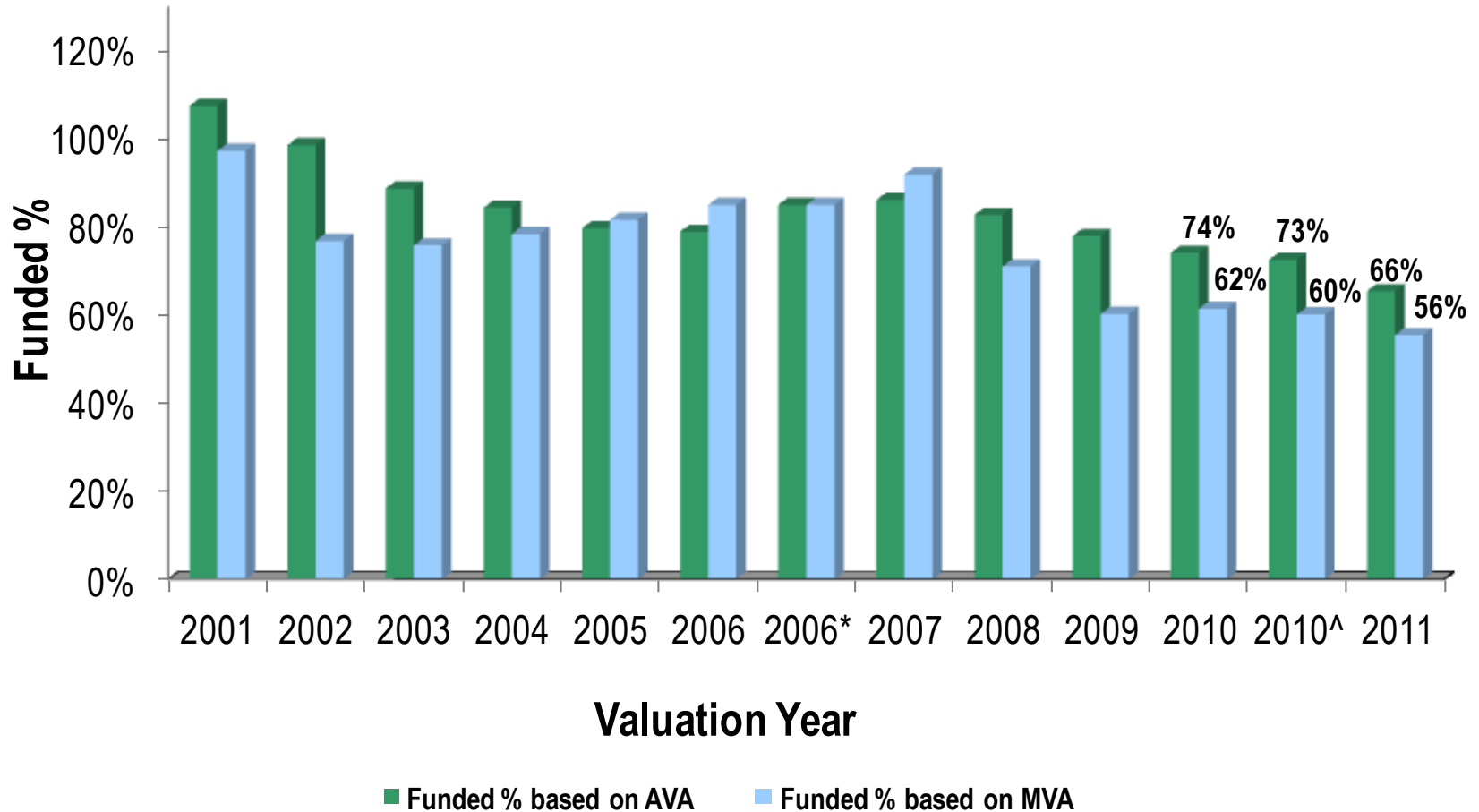
Actuarial Accrued Liability Compared to Actuarial Value of Assets (in Billions)



* After adjusting to market value.

^ Revised actuarial assumptions and methods.

Retirement System Funded % Based on Actuarial Value and Market Value of Assets



* After adjusting to market value.

^ Revised actuarial assumptions and methods.



Comments on the Investment Markets

- ◆ Investment markets have been very volatile.
- ◆ Valuation is based on a 5-year smoothed value of assets.
 - Reduces the volatility of the valuation results.
- ◆ 9/30/2011 smoothed value of assets was higher than market value.
 - Meeting the actuarial assumption will require average future market returns over 8%.
- ◆ 9/30/2011 valuation results based on market value:
 - Funded percent would be 55.5% (instead of 65.5%).
 - Employer contribution would be \$730.9 million (instead of \$590.6 million).



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